

## **REMARKS**

### **CLAIM STATUS**

Claims 1-8 are pending. Claims 1 and 8 are independent. Claim 1 has been amended, and claims 7 and 8 have been added to better clarify the invention in light of exemplary Figs. 3 and 7 and the description thereof in the specification. Thus, no new matter has been introduced.

### **SUMMARY OF THE OFFICE ACTION**

The outstanding Action is a non-final Action that again acknowledges the claim for foreign priority and the receipt of the priority document by the International Bureau, and acknowledges the acceptance of the drawings filed on May 1, 2007. The references included with the Information Disclosure Statement filed on August 24, 2006, are acknowledged as having been considered.

In addition to the above-noted acknowledgements, the outstanding Action presents a provisional rejection of claims 1-6 on the ground of nonstatutory obviousness-type double patenting, presents a rejection of claims 1-6 under the second paragraph of 35 U.S.C. § 112, and presents rejections of claims 1-6 under 35 U.S.C. §103(a).

### **PROVISIONAL OBVIOUSNESS-TYPE DOUBLE PATENTING REJECTION**

Item 2 on page 2 of the outstanding Action sets forth the provisional rejection of claims 1-6 on the ground of nonstatutory obviousness-type double patenting as being allegedly unpatentable over claims 1-6 of copending Application Serial No. 10/590,529. This rejection is traversed.

Initially it is noted that MPEP §804 II (B) (1.) clearly establishes the minimum requirements as to establishing any valid *prima facie* case of obviousness-type double patenting in terms of noting that:

Any obviousness-type double patenting rejection should make clear:

(A) The **differences** between the inventions defined by the conflicting claims - **a claim in the patent compared to a claim in the application**; and

(B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim at issue is anticipated by, or would have been an obvious variation of, the invention defined in a claim in the patent. (Emphasis added.)

The outstanding Action first errs by improperly noting the differences between claims 1-6 of this application and claims 1-6 of copending Application Serial No. 10/590,529. In this regard, independent claim 1 of copending Application Serial No. 10/590,529 recites a combination that requires a specifically recited heater having “a spiral heat radiation fin wound around the heater and having a fin pitch of 10 mm or less.” Claims 2-6 of copending Application Serial No. 10/590,529 all depend directly or indirectly from this independent claim 1 and, thus, include this subject matter of “a spiral heat radiation fin wound around the heater and having a fin pitch of 10 mm or less.” On the other hand, none of claims 1-6 of this application contain any limitations reciting a heater that has “a spiral heat radiation fin wound around the heater and having a fin pitch of 10 mm or less.”

Besides erroneously ignoring the above-noted clear difference between claims 1-6 of this application and claims 1-6 of copending Application Serial No. 10/590,529, the outstanding Action further errs by failing to explain any reason why the difference it does note as to claim 1 of this application and claim 2 copending Application Serial No. 10/590,529 would have been considered to be an obvious difference to one of ordinary skill in the art. Not only does this failure violate the above-noted directive of MPEP §804 II (B) (1.) (B), it violates the requirements of established court precedent. *See In re Kaplan*, 789 F.2d 1574, 1580, 229 USPQ 678, 683 (Fed. Cir. 1986) and the statement therein that a valid obviousness-type double patenting rejection requires “clear evidence to establish why the variation would have been obvious” and further noting that “[e]ven if obviousness of the variation is predicated on the level of skill in the art, prior art evidence is needed to show what that level of skill was.”). Further note the requirement for the PTO to produce substantial evidence set forth by the Administrative Procedure Act that is noted by the court in *In re Lee*, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002) as follows:

Tribunals of the PTO are governed by the Administrative Procedure Act, and their rulings receive the same judicial deference as do tribunals of other administrative agencies. *Dickinson v. Zurko*, 527 U.S. 150, 50 USPQ2d 1930

(1999). Thus on appeal we review a PTO Board's findings and conclusions in accordance with the following criteria:

5 U.S.C. 706(2) The reviewing court shall

(2) hold unlawful and set aside agency actions, findings, and conclusions found to be

(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;

\* \* \* \*

(E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute;

For judicial review to be meaningfully achieved within these strictures, the agency tribunal must present a **full and reasoned explanation** of its decision. The agency tribunal must set forth its findings and the grounds thereof, as supported by the agency record, and explain its application of the law to the found facts. [Emphasis added.]

Moreover, even if the PTO were to provide these required missing explanations as to the obviousness of these claim differences, it is respectfully submitted that as the present Application should now be considered to include only claims that clearly patentably define over the applied references, as fully discussed below, this provisional rejection of claims 1-6 on the ground of non-statutory obviousness type double patenting as being allegedly unpatentable over claims 1-6 of copending Application Serial No. 10/590,529 should be withdrawn based upon the MPEP §804 II (B) (1.) established procedure that:

If both applications [rejected based upon a provisional obviousness-type double patenting (ODP) rejection] are filed on the same day, the examiner should determine which application claims the base invention and which application claims the improvement (added limitations). The ODP rejection in the base application can be withdrawn without a terminal disclaimer, while the ODP rejection in the improvement application cannot be withdrawn without a terminal disclaimer. (Emphasis added.)

Here the application claiming the “base invention” is clearly this application as Application Serial No. 10/590,529 adds the above-noted limitation of the “spiral heat radiation fin wound around the heater and having a fin pitch of 10 mm or less.” Accordingly, the PTO should follow its own published guidelines of MPEP §804 II (B) (1.) and permit this “base

invention” application filed the same day as Serial No. 10/590,529 to issue without a terminal disclaimer.

### **35 U.S.C. § 112 REJECTION**

Item 4 on page 3 of the outstanding Action sets forth the rejection of claims 1-6 under the second paragraph of 35 U.S.C. § 112. This rejection is traversed.

Claim 1 has been amended to correct the recitation of “the recess” to be --the recessed part--. Accordingly, as “the recessed part” has clear antecedent basis, this part of the rejection of claim 1 on this ground is believed to be overcome.

The rejection of claim 1 based on the recitation of “both sidewalls” and an allegation of “insufficient antecedent basis for this limitation in the claim” is not understood. In this respect, MPEP § 2173.05(e) makes it clear that the lack of clear antecedent basis arises in limited circumstances all linked with the recitation in a claim of “the” or “said.” The first of these circumstances is “where a claim refers to ‘said lever’ or ‘the lever,’ where the claim contains no earlier recitation or limitation of a lever.” A second of these circumstances arises when there is a recitation of “said lever” or “the lever” and “two different levers are recited earlier.” A third circumstance arises when a claim recites “‘said aluminum lever,’ but recites only ‘a lever’ earlier in the claim.”

The term “said” or “the” has not been used in the noted claim 1 recitation which in its complete state reads as “both of sidewalls of the recessed part of the tray-shaped case that adjoin the sidewall provided with the steam supply port.” This full statement of claim 1 is a clear and definite statement that **introduces** two (“both”) newly recited sidewalls of the recessed part of the tray-shaped case and specifies that these **newly recited sidewalls** adjoin the previously recited sidewall of the recessed part of the tray-shaped case. As the recitation is both clear and definite, the withdrawal of the rejection of claim 1 under the second paragraph of 35 U.S.C. § 112 is respectfully requested.

With regard to the points raised as to the relative terms “roughly” and “generally” used in claims 2-4, it is noted that it is by now well established that “[i]f the claims, read in the light of the specification, reasonably apprise those skilled in the art both of the utilization and scope of

the invention, and if the language is as precise as the subject matter permits,” no more can be demanded. See *Shatterproof Glass Corp. v. Libbey-Owens Ford Co.*, 758 F.2d 613, 624, 225 USPQ 634, 641 (Fed.Cir.), *cert. dismissed*, 474 U.S. 976 (1985) (quoting *Georgia-Pacific Corp. v. United States Plywood Corp.*, 258 F.2d 124, 136, 118 USPQ 122, 132 (2d Cir.), *cert. denied*, 358 U.S. 884, (1958)). Further note that such relative terms (similar to the relative term “about”) are widely used in patents in order to “avoid a strict numerical boundary.” See *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1217, 36 USPQ2d 1225, 1229 (Fed. Cir. 1995). The use of the questioned relative terms “roughly” and “generally” in claims 2-4 is in the same context as these terms are as precise as the subject matter here permits as no strict numerical boundaries exist.

In this last regard, there is no disclosed criticality or precise fixed numerical boundary as to the degree of symmetry of the planar shape of the recessed part of the tray-shaped case or the heater in the recessed part of claim 2. Similarly, there is also none as to the inclination of the side opposite from the steam supply port relative “to a plane roughly perpendicular to said center line” as recited by claim 3, or the generally pentagonal shape as to the plane shape with the two sides forming the generally V shape of claim 4. All of these claimed relationships lack strict numeric boundaries but are nevertheless disclosed to be needed to maintain smooth steam flow and a uniform temperature distribution of the flowing steam. See paragraphs [0087], [0088], [0092], and [0096]-[0098] of Patent Application Publication No. 2007/0210058 that corresponds to this application.

Thus, as there are no precise fixed numerical boundaries that can be set as to these limitations, the terms “roughly” and “generally” of claims 2-4 are as precise as the subject matter permits, and would be understood by the artisan as to their role in maintaining smooth steam flow and a uniform temperature distribution of the flowing steam when read in light of the specification, the rejection of claims 2-4 under the second paragraph of 35 U.S.C. § 112 based on these recitals should also be withdrawn.

## **103 REJECTIONS**

### **A. CLAIMS 1 AND 4-6**

Item 14 on page 5 of the outstanding Action sets forth a rejection of claims 1 and 4-6 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Carron et al. (U.S. Patent No. 5,402,709, hereinafter "Carron"). This rejection is traversed.

Base independent claim 1 requires, *inter alia*, "a heating chamber provided with a ceiling steam outlet on its ceiling side, in which an object to be cooked is heated by steam supplied from the steam temperature-raising device via the ceiling steam outlet." Page 5 of the outstanding Action erroneously asserts that the Carron safety opening 56 (that is only taught to enable "quick evacuation of gas in case of accidental over pressure," see col. 12, lines 35-36) can be reasonably interpreted to be the "ceiling steam outlet" recited by this portion of claim 1. This assertion is erroneous because the claimed "ceiling steam outlet" must provide the cooking steam of raised temperature with regard to the claim 1 recitation that "an object to be cooked is heated by steam supplied from the steam temperature-raising device via the ceiling steam outlet" (emphasis added). The safety opening 56 of Carron cannot be **reasonably** interpreted to supply any steam, much less the required "steam supplied from the steam temperature-raising device" (emphasis added) of claim 1.

Base independent claim 1 further requires, *inter alia*, there must be:

a tray-shaped case having a recessed part which has a sidewall provided with a steam supply port through which steam from the steam generator enters the recessed part, the tray-shaped case being placed, with an opening of the recessed part directed downward, on the heating chamber at the ceiling steam outlet.

Page 5 of the outstanding Action further erroneously asserts that the Carron distribution device 46 can be **reasonably** interpreted to correspond to this claim 1 tray-shaped case. However, the paragraph bridging cols. 13 and 14 describes the distribution device 46 to be made up of **tubes** 108 and 110 which are not reasonably interpreted to correspond to the claimed "**tray-shaped case**." Also, the distribution device 46 is clearly stated to be "located at the outlet of opening 52" (col. 13, lines 67-68). Thus, the overheater 58 of Carron that is at the other side of "opening 52" cannot be reasonably said to be placed in any "recessed part" of the Carron taught distribution device 46.

In addition, the term “tube” has the customary and ordinary meaning of “a hollow cylinder or pipe ... usually long in proportion to its diameter ...” See “tube” as defined at “yourDictionary.com,” copy attached. On the other hand, the term “tray” is well understood to have a completely different meaning as to being a “flat receptacle, ... often with slightly raised edges ...” as further defined at “yourDictionary.com,” copy attached. The interconnected tubes that form the distribution device 46 cannot be reasonably equated to the claim 1 required “tray-shaped case having a recessed part.”

Also, to whatever extent that “tube” 108 joins the overheater 58 outlet “tube” 64 (that has the opening 52) to the top of “tube” 110 (see, the paragraph bridging columns 13 and 14 of Carron) this interconnection of “tubes” clearly cannot be reasonably interpreted to either teach or suggest the claim 1 required **“sidewall provided with a steam supply port”** through which steam from the steam generator enters the recessed part [of the tray-shaped case].”

In addition, claim 1 also requires the “recessed part” to have the claimed “opening” that must be “directed downward” as well as having the above-noted claim 1 “heater” therein. To whatever extent that “tube” 110 has an “opening directed downward” as to some of the steam outlets 112, these outlets are not taught or suggested to be “on the heating chamber at the ceiling steam outlet” as claim 1 requires.

Furthermore, Page 6 of the outstanding Action attempts to disregard all of the differences that it admits exist as to the teachings of Carron and the limitations of claims 1 and 4-6 based on assertions of “design choice” and allegations as to knowledge in the art.

However, the “design choice” rationale cannot be used when there is a stated problem being solved and a corresponding benefit achieved. See *In re Chu*, 66 F.3d 292, 36 USPQ2d 1089 (Fed. Cir. 1995).

With regard to allegations of “knowledge” in the art, such statements cannot be used as a substitute for the required production of “substantial evidence” under the Administrative Procedure Act as noted above with regard to the cited *Lee* decision. Also note *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001) that makes it clear that “[w]ith respect to core factual findings in a determination of patentability, however, the [PTO] . . . must point to some concrete evidence in the record in support of these findings.”

Thus, the above-noted reliance on “design choice” and mere allegations of knowledge in the art are further clearly both errors that alone require the withdrawal of the rejection of claims 1 and 4-6 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Carron in addition to the other clear errors noted above as to base independent claim 1.

### **B. CLAIMS 2 AND 3**

Item 14 on page 5 of the outstanding Action sets forth a rejection of claims 2 and 3 under 35 U.S.C. § 103(a) as being allegedly unpatentable over Carron in view of Koether et al. (U.S. Patent No. 5,485,780, hereinafter “Koether”). This rejection is traversed.

Koether is cited as to the subject matter added by claims 2 and 3 that depend from claim 1 and does not cure the deficiencies noted above as to the reliance on Carron alone as to parent independent claim 1. Accordingly, claims 2 and 3 patentably define over the applied references for at least the same reason that parent independent claim 1 does.

In addition, and contrary to the assertion at the top of page 7 of the outstanding Action, there is no showing or suggestion in relied on Fig. 7 of Carron (or in its associated description) of any “tray-shaped case,” much less one having a “recessed part which has a sidewall provided with a steam supply port,” or one in which this non-existent recessed part has “a planar shape.” As noted above, both of the components of the distribution device 46 (108 and 110) are taught to be **tubes** that by definition are cylindrical and the single curved cylindrical tube wall has no planar part. Also, this relied upon distribution device 46 that includes the interconnected tubes 108 and 110 has no heater “placed in the recessed part,” as noted above.

Furthermore, Koether is an oven that uses electric heaters 30 “to heat air for convection cooking” (see the sentence bridging cols. 3 and 4). This convection heating clearly takes place inside the cooking chamber unlike the heating of the steam of Carron that occurs outside the cooking chamber. Thus, the air convection oven of Koether appears to have nothing in common with the Carron steam oven apart from using heated gas for cooking. Also, there is no explanation of how the Examiner derives a teaching from relied upon Figs. 4 and 6 of Koether of the required “tray-shaped case,” much less one having the required “recessed part” with a heater “placed in the recessed part of the tray-shaped case such that a planar shape of the heater is



roughly symmetrical with respect to said center line [of steam flow, not “heat flow” as asserted].”

In this regard, page 7 (at line 7) of the outstanding Action suggests that the “tray-shaped case” having the required “recessed part” is somehow taught by what is shown as being “below top wall 52” in Fig. 4. However, the majority of the Koether components are illustrated to be below the top wall 52 in Fig. 4 and nothing is taught by Koether as to there being any “tray-shaped case,” much less one having the required “recessed part.” To the extent that removable cover 40 has baffles 62 and holes 63 for convection air flow (as better shown by Fig. 7 and described at col. 5, lines 20-26) there is no recess with any sidewalls and no tray-shaped case.

Moreover, it is not seen to be rational to assert that the artisan would attempt to modify the Carron overheated steam oven by the incompatible air convection oven based teachings of Koether as asserted on the last line of page 7 (at lines 10-14) of the outstanding Action. This lack of a rational basis to suggest the proposed modification defies recent Supreme Court precedent, *see KSR Int’l v. Teleflex Inc.*, 127 S.Ct. 1727, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)) that “there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”

Besides lacking the required “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness,” the outstanding Action also violates the guidelines of MPEP 706.02(j) that requires that in order to support a rejection under 35 U.S.C. 103(a), the examiner is to **identify the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter.** In this respect, the question is how would the completely different steam overheater 58 of Carron with its inlet tube 62, heater containing tube 60, and outlet tube 64 that are fully outside the heating chamber have been modified by the artisan to adapt them to the inside the oven convection heating removable cover 40 (with its baffles 62 and holes 63) teaching of Koether to provide for convection air flow.

Accordingly, withdrawal of this improper rejection of claims 2 and 3 under 35 U.S.C. §103(a) as being allegedly unpatentable over Carron in view of Koether is respectfully requested for this reason as well.

**C. NEW CLAIM 7**

New claim 7 depends from claim 1 and, thus, patentably defines over the references for the same reasons parent claim 1 does. In addition, none of the applied references teach the features added by new claim 7 that requests the heater in the received part to be located over the ceiling steam outlet.

**D. NEW CLAIM 8**

New claim 8 includes all the limitation of claim 1 and accordingly, patentably defines over the applied references for at least the same reasons as claim 1 does.

**CONCLUSION**

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Raymond F. Cardillo, Jr., Reg. No. 40,440 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Dated: **January 29, 2010**

Respectfully submitted,

By 

Michael R. Cammarata  
Registration No.: 39,491

#29221  
BIRCH, STEWART, KOLASCH & BIRCH, LLP  
8110 Gatehouse Road  
Suite 100 East  
P.O. Box 747  
Falls Church, Virginia 22040-0747  
(703) 205-8000  
Attorney for Applicant

**Attachments**



[Dictionary Home](#) » [Webster's New World College Dictionary](#) » [tray](#)

- [Webster's Dictionary](#)
- [Sentence Examples](#)
- [Synonyms Thesaurus](#)
- [Computer Definition](#)

## tray

### tray definition

**tray** (trā)

**noun**

1. a flat receptacle made of wood, metal, glass, plastic, etc., often with slightly raised edges, used for holding or carrying articles
2. a tray with its contents a tray of food
3. a shallow, boxlike, removable compartment of a trunk, cabinet, etc.

Etymology: ME *treie* < OE *treg*, *trig*, wooden board, akin to *treow*, *tree*

Webster's New World College Dictionary Copyright © 2009 by Wiley Publishing, Inc., Cleveland, Ohio.  
Used by arrangement with John Wiley & Sons, Inc.

-  [Print](#)
-  [E-mail](#)
-  [Link/Cite](#)
-  [Bookmark](#)
-  [Share on Facebook](#)

### comments

Do you have more to add? Sign in to share your linguistic knowledge or observation.

[Connect with Facebook](#)

[Ads by Google](#)

[Browse dictionary definitions near \*tray\*](#)

 [trawlnet](#)

[tray card](#) **C**

 [trawler](#)

[tray drive](#) **C**



[Dictionary Home](#) » [Webster's New World College Dictionary](#) » tube

- [Webster's Dictionary](#)
- [Sentence Examples](#)
- [Synonyms Thesaurus](#)
- [Medical Definition](#)
- [Phrases Idioms](#)
- [Computer Definition](#)

## tube

### tube definition

**tube** (tēob, tyēob)

#### **noun**

1.
  - a. a hollow cylinder or pipe of metal, glass, rubber, etc., usually long in proportion to its diameter, used for conveying fluids, etc.
  - b. an instrument, part, organ, etc. resembling a tube bronchial tubes, eustachian tubes
  - c. a fallopian tube: usually used in pl.
2. a rubber casing inflated with air and used, esp. formerly, with an outer casing to form an automotive tire
3. a cylindrical container made of thin, pliable metal, plastic, etc., fitted at one end with a screw cap, and used for holding pastes or semiliquids, which can be squeezed out
4. □
  - a. [electron tube](#)
  - b. [vacuum tube](#)
5.
  - a. a tubular tunnel for a railroad, subway, etc.
  - b. BRIT. an underground electric railway; subway
6. BOT. the lower, united part of a gamopetalous corolla or a gamosepalous calyx
7. ELEC. the tubular space bounded by the lines of electric or magnetic force passing through every point on a closed curve on the outside of a charged body  
in full **tube of flux** or **tube of force**

Etymology: Fr < L *tubus*, a pipe

#### **transitive verb** **tubed**, **tubing** **tub'ing**

1. to provide with, place in, or pass through a tube or tubes
2. to make tubular

#### **Related Forms:**

- **tubelike** **tube'-like' adjective**